

Remarks/Arguments:

Reconsideration of the application is respectfully requested. Claims 1-33 are currently pending. Claims 1, 18 and 33 are independent and have been amended. Dependent claims 11, 14, 15, 17, 28, 29, 30 and 32 have also been amended. New claims 44-46 have been presented. Claims 34-43, previously withdrawn in response to a restriction requirement, have been cancelled. Applicants wish to thank the Examiner for providing a fax of the Yahoo reference. Applicants note with appreciation that the drawings have been accepted.

All of the previously pending claims were rejected as obvious under 35 U.S.C. 103 over the combination of Chakrabarti (US Pat. No. 6356899) and Yahoo, alone or in further combination with additional references. Claims 1-5, 10, 11, 13-15, 17-18, 19-22, 27-30, 32-33 were rejected over Chakrabarti and Yahoo. Claims 6 and 23 were rejected over Chakrabarti and Yahoo in combination with Vora (US Pat. No. 5819273). Claims 7 and 24 were rejected over Yahoo and Chakrabarti in view of Li (US Pat. No. 6480843). Claims 8 and 25 were rejected over Yahoo and Chakrabarti in view of Sanfilippo (US Pat. No. 6260008). Claims 9 and 26 were rejected over Yahoo and Chakrabarti in view of Schabes (US Pat. No. 6424983). Claim 12 was rejected over Yahoo and Chakrabarti in combination with Feng (US Pat. No. 6483523). Claims 16 and 31 were rejected over Yahoo and Chakrabarti in combination with Jacobson (US Pat. No. 6167397).

Claim 1 has been amended to more particularly point out and distinctly claim the invention. The third paragraph now recites "a plurality of navigation states, wherein each navigation state corresponds to a particular expression of attribute-value pairs and to a particular subset of the materials, wherein for each navigation state each of the attribute-value pairs in the particular expression of attribute-value pairs corresponding to that navigation state characterizes in accordance with the expression all of the materials in the particular subset of materials corresponding to that navigation state, and wherein for at least one navigation state the particular expression of attribute-value pairs corresponding to that navigation state is a conjunction of at least two mutually incomparable attribute-value pairs." The last paragraph now recites "a search interface, the search interface including a free-text search tool for accepting free-text queries, the search interface being adapted to generate multi-term interpretations of free-text queries, wherein a multi-term interpretation maps a free-text query to a navigation state that corresponds to a particular expression of attribute-value pairs that is a conjunction." Claims 18 and 33 have been

similarly amended. The dependent claims have been amended primarily to provide correct antecedent basis.

The claims are believed to be allowable over the cited prior art. This discussion will focus on claim 1, and particularly on the third paragraph of claim 1 (although Applicants do not concede that the other elements are present in Chakrabarti and/or Yahoo singly or in combination). Claim 1 is believed to be patentable over the combination of Chakrabarti and Yahoo. Similarly amended claims were determined by the Patent Office to be patentable over the combination of Chakrabarti and Yahoo in a related application, Application Ser. No. 09/573,305. Although Applicants present the relevant arguments here, the Office is respectfully invited to review the file of that case if such reference would facilitate prosecution of the present application.

As an initial matter, Applicants submit that there is no motivation to combine Yahoo and Chakrabarti. The cited Yahoo art is a live Web site, the operation of which is tied to the underlying organization of information and data structures of that Web site, and which contains no suggestion or teaching on alternative implementations. Chakrabarti discusses a way of organizing information that is designed to be different from Yahoo (*see* Chakrabarti, 2:7-24). Accordingly, there is no motivation to combine the references. Also, in view of the distinct ways of organizing information, it cannot readily be determined how Yahoo could be incorporated into the information database of Chakrabarti or how the resulting system would operate.

The third paragraph of claim 1 has three parts. First, it includes “wherein each navigation state corresponds to a particular expression of attribute-value pairs and to a particular subset of the materials.” Second, it also includes “wherein for each navigation state each of the attribute-value pairs in the particular expression of attribute-value pairs corresponding to that navigation state characterizes in accordance with the expression all of the materials in the particular subset of materials corresponding to that navigation state.” Third, it also recites “wherein for at least one navigation state the particular expression of attribute-value pairs corresponding to that navigation state is a conjunction of at least two mutually incomparable attribute-value pairs.”

These requirements are not taught by Chakrabarti in combination with Yahoo. This can be shown by referring to Yahoo Exhibit II, which is referenced in the Office Action as an example of a Yahoo “navigation state.” Looking at Exhibit II, according to one argument in the Office Action, the terms listed at the top of the page “Humanities>Literature” are treated as an

expression of attribute-value pairs. Also, all of the Web pages classified under “Humanities>Literature” are treated as a corresponding subset of materials. Under this interpretation, at least the third part of the limitation cannot be met because “Humanities>Literature” is a single “attribute-value pair” and not a conjunction of “at least two mutually incomparable attribute-value pairs,” as the third part requires. Applicants also submit that compound Yahoo terms like “Cultures and Groups” are not the same as a conjunction of at least two “mutually incomparable attribute-value pairs.” Being mutually incomparable is a property that can only apply between two attribute-value pairs. In the Yahoo system, the individual terms “Cultures” and “Groups” do not define two attributes-value pairs that can be independently used to characterize an item or can be navigated or selected independently from each other. They form in effect a single “attribute-value pair,” made up of two words. Chakrabarti does not overcome this deficiency in the Yahoo “navigation states.”

Under a second interpretation, each term shown in Exhibit II could be treated as an attribute-value pair and the particular expression could be the conjunction of all of the directory terms shown, such as “Arts>Humanities>Literature,” “Authors,” “Awards,” etc. Again, all of the Web pages classified under “Humanities>Literature” are treated as a corresponding subset of materials. In this case, however, this page cannot satisfy the requirement that “each of the attribute-value pairs in the particular expression of attribute-value pairs characterizes in accordance with the expression” the corresponding subset of materials, because each of the terms does not apply in the same way to all of the classified Web pages. For example, “Poetry” probably would not apply to a page classified as “Reference.” Chakrabarti does not teach the claimed type of “navigation states.” No such state can be constructed in Yahoo, alone or in combination with Chakrabarti, for which the expression is a conjunction of “at least two mutually incomparable attribute value pairs” set forth in part 3 and also satisfies the “characterizing” relationship between the expression of attribute-value pairs and the subset of materials set forth in part 2.

Claim 1 is also patentable over the cited references because the cited references do not teach or suggest “a multi-term interpretation maps a free-text query to a navigation state that corresponds to a particular expression of attribute-value pairs that is a conjunction”, as required in paragraph 4 of the claim. The Yahoo pages, Exhibit II and Exhibit VII, that are cited in the Office Action are not believed to show multi-term interpretations generated for a free-text query.

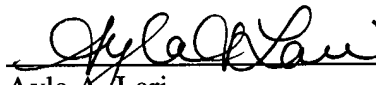
Moreover, since Yahoo and/or Chakrabarti do not contain the presently claimed type of navigation states, it is not possible to generate this type of multi-term interpretation.

In summary, none of the navigation states and corresponding particular expression of attribute-value pairs and particular subsets of materials that can be constructed to correspond to any page of Yahoo satisfies the requirements of claim 1. Independent claims 18 and 33 have been similarly amended and are believed to be patentable over the cited art for similar reasons. The remaining claims are believed to be allowable at least because they are dependent on allowable base claims. Applicants respectfully request that a timely Notice of Allowance be issued in this case. If there are any remaining issues, the Examiner is urged to contact the undersigned at the telephone number listed below.

A Petition and fee for a two-month extension of time are included herewith. The Commissioner is authorized to charge Deposit Account No. 08-0219 for any fees that may be due or to credit Deposit Account No. 08-0219 any overpayment in connection with this paper.

Respectfully submitted,

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Ayla A. Lari
Reg. No. 43,739
ayla.lari@wilmerhale.com

WILMER CUTLER PICKERING
HALE AND DORR LLP
60 State Street
Boston, Massachusetts 02109
Telephone: (617) 526-6598
Facsimile: (617) 526-5000